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Abstract

I explore two novel characteristics of financial reporting, the order in which the financial statements are presented in the annual 10-K filing (financial statement order or FSO) and the number of times financial statements are mentioned in the 10-K (financial statement mentions or FSM). In this study, I explore the determinants of FSO and FSM signals for the income statement. Additionally, I provide evidence that FSO and FSM income statement signals are related to characteristics of earnings. In particular, I show that FSO and FSM are related to the persistence of earnings and the weights on earnings and book value in valuation. I also show that earnings response for future earnings is related to FSM. Overall, I show that FSO and FSM are related to earnings and valuation properties and may be one method managers can communicate relevant information about earnings.

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1. Introduction

Financial reporting is a constantly evolving process. New standards issued by the Financial Accounting Standards Board (FASB) and regulations issued by the Securities and Exchange Commission (SEC) result in changes in the content of required filings, notably the 10-K annual report that contains the financial statements and other important disclosures. For example, in 1987 the FASB required the disclosure of the cash flow statement (SFAS 95), and in 1997 required the disclosure of the statement of comprehensive income (SFAS 130). Regulations issued by the SEC (Regulations S-X and S-K) guide other disclosure requirements, such as the requirement that three years of income statement data and two years of balance sheet data be presented in the financial statements.

A subtle aspect of the presentation of financial statements is the order in which the financial statements are presented. I refer to this as financial statement order, or FSO. There is no guidance by the FASB or the SEC on the order in which companies must present this information, only that information be disclosed within specified locations of SEC filings (e.g., most companies disclose the financial statements in Item 8 of the 10-K filing). When financial reporting standards lack guidance on aspects of financial reporting, companies likely consider the disclosure choices of peers, and may make strategic choices in how to report. In this paper, the financial statement order is extracted using textual analysis from 10-K filings. Empirically, the most common order is: 1) balance sheet, 2) income statement, 3) statement of stockholder's equity, and 4) cash flow statement, with 67% of the sample selecting this default order, BISC, 1st B - Balance Sheet, 2nd I - Income Statement, 3rd S - Stockholders Equity, 4th C –

Statement of Cashflows. I will refer to FSOs using the same pattern and labels going forward.

The second most common order is IBCS, with about 11% of firms selecting this order.

Occasionally, companies change the order in which their financial statements are presented. In this paper, I provide descriptive evidence of this subtle financial reporting choice by firms and explore characteristics associated with the different observed financial statement orders.

An interesting motivating anecdote is the evolution of the strategy of Amazon.com and corresponding changes observable in Amazon's financial reporting as seen in 10-K filings.

Amazon held their IPO on May 15, 1997. As is typical with most startups, Amazon was unprofitable in the early years, but survived the shakeout in the hi-tech industry following the bursting of the internet bubble in early 2000. Although Amazon began as an online bookseller, it was clear that the company intended "to expand its catalog into other information-based products, such as music" (Amazon.com 1997). Amazon expanded to music and videos by 1998 and discusses an ambitious strategy to become the "best place to buy, find, and discover any product or service available online" (Amazon.com 1998, 3). Besides expanding its product line, Amazon expanded geographically into the U.K. and Germany in 1998, into France and Japan in 2000, and into many other countries since.

Amazon grew and evolved as a company through internal growth and acquisitions and first turned a small profit in the fourth quarter of 2001. Since 2002, Amazon has generated positive and generally increasing operating cash flows, and since 2003 has generated generally positive and increasing annual net income.

Over time, Amazon's annual report became longer and more complex. In the annual report, Amazon discusses aspects of its operating and financial strategy, such as a "focus on balancing growth with operating efficiency" (Amazon.com 2000, 20) and starting in 2003 the annual report states that the "financial focus is on long-term, sustainable growth in free cash flow," which is driven by "increasing operating income and efficiently managing working capital and capital expenditures" (Amazon.com 2003, 22).

One of the features of Amazon's 10-K that changed over time is the order of its financial statements. In the year of its IPO, Amazon listed the financial statements in the following order BISC. In 2000, the cash flow statement moved to the third position in the financial statement order. In 2003, the financial statement order changed again to CIBS. Although there is no discussion in the 10-K filings directly about the financial statement order, it is notable that as Amazon generated cash flows and specifically stated that the financial focus is on free cash flow, the cash flow statement shifted from last in the financial statement order to first. In the 2003 10-K, Amazon does state that the "principal source of liquidity are cash flows generated from operations and [cash equivalents on hand]." However, Amazon also states that "cash flows are subject to substantial uncertainty" casting doubt on the reliance that can be placed on these cash flows. Additionally, articles in the popular press have questioned the reliability of Amazon's cash flows for use in valuation (Fool, 2015; Trainer, 2014).

FSO is an inherent choice that is made in the process of preparing the 10-K disclosure uploaded to the SEC. While this may not seem like a major decision, over 30% of firm-year observations show a deviation by managers from the presumptive default otherwise used, BISC. When firms change away from this FSO, they most often revert back to BISC the next year.

It is not clear why this has become the FSO of choice. Though inferences could be made about the seeming default FSO, those inferences would likely be insufficient without statistical analysis. It could be assumed that this order is a general indication of information content or that it is merely the order that is of interest to investors.

Additionally, the frequency with which management discusses a financial statement (financial statement mentions, or FSM) may be indicative of management directing investor attention toward information. Alternatively, discussion of the financial statements may be driven by the complexity of the financial statement being discussed. The complexity of the information may force managers to discuss the information in an effort to better inform investors. One version of financial statement complexity is when bad news has been revealed and management must discuss the bad news, its impact on the financial statements in the present and in the future.

It is possible that FSO aligns with firm value maximization. That is, that firms place first in the FSO that which will result in the greatest or most correct valuation for the firm. Statistical methods can help determine if this is a main factor in determining FSO in the 10-K. When managers use an FSO other than the presumptive order, or even using an FSO that is different from what the firm has done in the past, they may draw attention to the actions taken by management. As a result, there may be increased scrutiny or attentiveness from investors.

Management disclosure decisions have been shown to align with their personal incentives and to deviate from areas in which there are negative consequences managers incentives have been carefully tailored overtime to align with in increasing value of the firm

which generally means higher stock price. Specifically, managers have been shown to avoid potential litigation-inducing actions while being less hesitant to take advantage of situations where value can be extracted with less fear of litigation (Huddart et al., 2007).

Because managers' incentives are carefully tailored by boards of directors to encourage maximization of firm value, we would expect managers would seek to make disclosures that allow the maximization of the stock price of the firm. Alternatively, when investors are provided insufficient information to justify an increased share price investors are left in doubt of the value of the firm. Managers are statutorily obligated to make truthful statements about the firm whenever disclosures are made. Non-disclosure is likely to be perceived as a continuation of the status quo since disclosure of negative events is generally required to be revealed in a timely manner. Furthermore, firms may be hesitant to reveal their competitive advantages (good news) publicly as this may reveal that information to competitors; this may lead to managers not making explicit disclosures concerning positive developments. Instead, managers may elect to give signals instead of making disclosures.

There are many reasons companies may use signals instead of disclosures, and I discuss two. First, disclosure comes with the caveat of being available to competitors and giving them information about competitive advantages that firms generally prefer to remain confidential. Second, disclosures come with litigation risks/costs if any investors or regulators believe that the disclosures are misleading. These issues are not a concern with signals and may incentivize managers to make signals rather than give disclosures. Gonedes (1978) says, "Corporate signaling entails managements' behaving as if they are providing observables with which agents can make inferences about unobservables." One example of a signal is the dividend signal,

which may be interpreted as a positive signal of expected future profitability, though it may alternatively be interpreted as an admission from the firm that there are few profitable investments the firm can make with excess cash flow; the dividend signal has been shown to be of little usefulness (Black & Scholes, 1974; Watts, 1973).

Signaling information credibly may require a cost to the signaler to be interpreted credibly. For example, a firm getting audited financial statements by a Big 4 auditor can be interpreted as a signal of improved financial reporting quality, and this comes at a cost of increased audit fees and likely higher costs of internal financial reporting. I use the term signal more broadly as a way managers may communicate or emphasize by the order in which information is presented and the extent to which it is discussed. Thus, placing the income statement is a way to emphasize that statement over the others and is a potential signal to investors. However, this is different vs. other signals because there is no cost to changing the order of presentation of the financial statements.

Financial statement order and financial statement mentions could be other ways for managers to signal the importance of certain financial information without making explicit statements. Because managers are less likely to take actions that result in litigation risk and more likely to take actions that have low litigations risk (Huddart et al., 2007), managers may use FSO as a way to signal relevant information to investors. Low litigation risk actions, such as using the order of financial statements to emphasize information, are one way managers can continue to communicate information about firm value without incurring the inherent risks associated with other disclosure mediums.

FSO 10-K may be used by managers to suggest that certain financial statements are of particular importance to the valuation decisions being made by investors. There is no guidance by the FASB or the SEC on the determination of FSO, however Regulation G issued by the SEC does address the prominence that GAAP vs. non-GAAP information is given in the 10-K. Putting something first is one way of making it more prominent. Investors can infer from FSO that managers are giving a signal that, for instance, the statement presented first is of particular importance to the firm's strategic goals and progress because of the prominence given to that financial statement. This could result in investors spending more time evaluating the disclosure surrounding those goals and progress and adjust valuations accordingly.

It is possible that firms use disclosure or signals selectively in an attempt to distract investors. In extreme cases, false or misleading disclosure may contribute to incorrect valuations and increased litigation risk. FSO and FSM are unlikely to be misused by management as they only serve to emphasize certain information and thus misuse of these signals is unlikely. For FSO and FSM to be misused, they would need to be relied upon and their misuse would likely center around the highlighting of earnings to increase the effect earnings have on returns or the burying of losses behind other financial data to minimize their effects. However, this misuse may be counterproductive as it would highlight information via movement of financial statements and potentially expose them to greater scrutiny. On the other hand, FSO signals may only serve to highlight the need for greater analysis of or reliance on that information signaled as being of particular importance to the future of the enterprise.

I explore the impact of FSO and FSM on earnings and valuation properties of the firm. With the extracted financial statement order, I create an indicator variable to capture whether

the income statement appears first in the financial statement order, IS1, and use this as a proxy for a firm signaling increased relevance of earnings. I create another variable to capture the number of times the income statement was mentioned in the 10-K, ISc, which could be a proxy for the importance of earnings or a proxy for complexity. I explore the impact of these variables in three different settings.

First, I explore the impact of placing the income statement first on the persistence of earnings, arguing that if firms are signaling that earnings are more relevant, they may have greater earnings persistence. Earnings persistence has been used as a proxy for earnings' reliability and as an indicator of firm value (Richardson et al., 2005). Using persistence as a proxy for real differences in the quality of earnings allows the differentiation between investor perception and earnings information about future earnings. I estimate earnings persistence using IS1 as an interaction to see if the placement of the income statement is related with earnings persistence. I find a positive and significant association between the income statement signal, IS1, and the persistence of earnings, consistent with the placement of the income statement providing information relevant to properties of earnings and that there is potential information communicated by managers in the placement of the income statement. When estimating the earnings persistence regression with the number of times the income statement is mentioned, a potential proxy for complexity, the opposite relation is observed. In particular, the impact of FSM on earnings persistence is *negative*.

Second, I explore the impact of FSO and FSM on the valuation weights placed by firms. In a value relevance framework (Ohlson, 1995), I estimate a regression of stock price on earnings and book value and explore the impact of interactions of these variables with IS1 and

ISc. Consistent with income statement placement signaling value-relevant information about the firm, the valuation weight on earnings is higher and the weight on book value is lower when the income statement is placed first. In striking contrast, the number of times the income statement is mentioned has the opposite relation; the valuation weight on earnings is *lower* and the weight on book value is higher when the income statement is mentioned more frequently, consistent with the income statement mentions being a proxy for complexity rather than a signal of increased relevance of income in valuation.

Third, I explore the impact of FSO and FSM on the response to earnings. The earnings response coefficient, ERC, has been extensively studied and is used as a proxy for the informativeness of earnings (Lennox & Park, 2006). I explore the impact of FSO and FSM on the ERC by including interactions of IS1 and ISc with earnings. I do not find that the FSO signal income statement first, IS1, is associated with the ERC in contemporaneous returns but I do observe an association between ERC and ISc for future returns. Additional analysis by time period suggests this effect may be mitigated by XBRL data availability.

Overall, my research shows that there is information content in the subtle characteristic of the order in which the financial statements are presented by companies in their annual filings. Additionally, the frequency with which the income statement is mentioned exhibits the opposite relation consistent with it being a proxy for complexity. This information being presented by managers relative to the income statement seems to be, on average, relied on by investors in assigning value to the firm to a greater extent when the income statement is placed first in the FSO which coincides with increased persistence in earnings. Thus, it appears this

information is received by investors through this signal from managers. This evidence suggests that FSO and FSM are influenced by different factors.

The rest of this dissertation proceeds as follows: First, I layout the relevant background. Second, I put forward my hypothesis development. Third, I cover the data used. Fourth, I present the results of my analysis. Lastly, I summarize my study and findings.

2. Background

2.1. Institutional Background

The 10-K is an integral disclosure made by every public firm every year. The SEC requires the 10-K to be filed annually. These disclosures, along with many other required disclosures, are stored in the SEC's Edgar database. The Edgar database is a publicly available repository of disclosures made by public firms that is available through the SEC website to anyone with internet access. The 10-K, and the financial statements that accompany it, are the responsibility of the management team of each firm. Additionally, CEOs and CFOs are required to sign the financial statements that are a part of the 10-K affirming the validity of the information presented in them after Sarbanes-Oxley was passed in 2002.

The 10-K disclosures are carefully assembled. There are entire teams in the firm, and contracted by the firm, that provide input into what will be reported in the 10-K and financial statements, what should be disclosed and what should not be disclosed. The regulatory environment has reached a nexus where the requirements inherent in this disclosure result in a fairly routine and consistent disclosure format. The requirements of what must be discussed in these disclosures have also made them longer. The length of the 10-K has made it hard for

management to bring information to the attention of investors so that investors can properly value the firm in this process.

10-Ks have a financial statement order (FSO), which is a characteristic of the filing that may be of significance. Whether that FSO is meaningful depends on why it was selected and how the market receives it. In addition to FSO, I have extracted the number of times a financial statement was mentioned in the 10-K that I call financial statement mentions. Financial statement mentions, FSM, is a distinct concept that could be driven by necessity rather than a desire to emphasize a particular financial statement. A need to discuss a financial statement could be driven by the complexity of information being communicated in the financial statement. In particular, FSM could be driven by the need to explain negative information and the efforts of management to mitigate the effects of the bad news that accompanies it. However, FSM could also be an emphasis of the Financial Statement in question. A desire to emphasize information in a financial statement may lead managers to add more detailed explanations of the results as to draw investor attention to that information.

FSO, at first glance, is an innocuous choice. Further, as shown in Table 1, 70% of the time the FSO observed is: balance sheet 1st, income statement 2nd, statement of cash flows 3rd, and statement of owners' equity last (shortened as BICS). Firms use a different FSO only 30% of the time, on average. However, this use of a different FSO occurs often enough to warrant the following questions. Why are different FSOs used? Could selection of FSO be an effort by managers to bring information to investors' attention? Could it be that they are trying to get investors to overlook other information? What is the effect of deviations from the typical financial statement order?

FSM is similar in nature to FSO in that managers choose how and to what extent they discuss the financial statements and what emphasis to give the information found in each of them; however, there is a logical path to determining the way a financial statement will be discussed. Complexity will likely give rise to additional discussion as will bad news. Bad news and complexity may cause management to explain more to help investors understand the long-term ramifications of the information presented.

2.2. 10-K Research

Prior research suggests that the 10K disclosure process is driven by regulation and information that is relevant to valuation decisions (Arif et al., 2019; Bodnaruk et al., 2021; Dyer et al., 2017; Huddart et al., 2007). Thus, FSO and FSM are likely the result of a deliberate financial reporting choice, particularly as a main effect for these phenomena, because of the heavy scrutiny that is given to the 10-K. However, there are no requirements surrounding FSO or FSM in any regulation or standard. We do observe that BISC is the most typical FSO, as shown by the data. Prior research shows that deviation from what is expected does have a significant impact on people's attention (Doherty et al., 2005). I explore the impact of the order in which financial statements are presented.

It should be noted that I am neither advocating for or against any new financial reporting requirements in this study. Rather, I explore the impact of these subtle financial reporting characteristics. Managers may reveal relevant information in the ways that they disclose information and interact with investors.

Two prior studies have explored the impact financial statement order in a very descriptive manner. First, Mulford and Conde (2017) collect a sample of 400 firm-year observations from 2015. Overall, the financial statement orders they document are very similar to those I document. They find that firms that place the income statement first are larger and more profitable. They also show that, in their sample, firms that employ the big four audit firms are three to four times more likely to place income statement first. Second, Hennes & Schenk (2018) explore this phenomenon in 78 firm-year observations in the energy and petroleum sectors. They also show that larger firms are more likely to place income statement first. I expand on these prior studies in that I use the entire population of firms in Edgar with financial statement orders that have been extracted using textual analysis. In addition, I conduct analysis exploring the persistence of earnings and the value relevance of financial statement order; the prior studies did not conduct any regression analysis and did not explore earnings persistence or the value relevance of FSO. Finally, these studies did not explore the extent to which financial statements are mentioned in the text.

The 10-K is a well-studied disclosure and many of its features have been scrutinized heavily. The MD&A, Managements Discuss and Analysis, of the 10-K has been studied extensively (Brown & Tucker, 2011; Muslu et al., 2015). In addition, other aspects of financial reporting such as non-GAAP earnings and management forecasts have been studied to see if they accurately reflect firm operations or if they are used to give the appearance of good firm performance (J. Doyle et al., 2003; J. T. Doyle et al., 2013).

Other studies have looked at whether the 10-K contains information content beyond what is revealed in earnings releases and the financial statements. The 10-K has been shown to

contain information about financial constraint beyond what is revealed in the financial statements (Bodnaruk et al., 2021). Many of these studies have shown that the 10-K contains information that pertains to disclosure requirements and that is relevant to the valuation of the firm. The 10-K is deliberately constructed to fulfill regulations and disclosure obligations. It has become lengthy, almost unwieldy, for investors because of the amount of information contained in it (You & Zhang, 2009). Much of the length and information bloat is due to the increasing number of regulations and requirements for disclosures to be made that have been created by the FASB and SEC (Dyer et al., 2017).

I use the 10K research that has been published to guide my understanding of how FSO and FSM are determined and how investors might incorporate this information in their valuations. Limited attention and anchoring have been extensively studied in various contexts in the accounting literature (Joyce & Biddle, 1981; Butler, 1986; Hirshleifer & Teoh, 2003; Hirshleifer et al., 2011).

2.3. Limited attention and Anchoring

Limited attention is the idea that people are incapable of attending to all available information. Further, people tend to lose attentiveness as they process information. This limited attention leads to the information gathered first being remembered and weighed more heavily than information encountered later that the person may not have the capacity to assimilate.

Anchoring also influences the processing of information. If a person is given an opportunity to determine a value but is first given an initial value as a suggestion, that person is

likely to give a value that is closer to the suggested value, even if the suggested value is wildly incorrect. This can be used to manipulate people to change what they would otherwise judge to be the correct value.

These concepts highlight the importance of what comes first in the process of acquiring information. Further, Reg G was enacted to combat these very effects by requiring the standard GAAP information to be given equal or greater prominence in disclosures vs. non-GAAP disclosures. In part, this means that GAAP information must be presented first as to prevent non-GAAP information from being given greater prominence. Anchoring and limited attention likely have an impact in the context of financial statement order. In particular, the information presented first could be more likely to be remembered by readers of financial statements and may act as anchors in valuation.

2.4. Management Incentives

Prior 10-K research is also influenced by concepts of manager incentives and the negative consequences that might befall management if they are to act in a way that will result in increased disclosure risk. In the finance literature, manager incentives have been explored and subsequently engineered in practice to align managers' incentives with investors' wellbeing. This has even extended to encouraging risk-taking activity that may result in increased income for investors and managers (Aggarwal & Samwick, 2006; Coles et al., 2006, 2012; Rego & Wilson, 2012).

Management compensation packages are increasingly following the guidelines that ensure this alignment takes place and the SEC has enacted regulations that aids shareholders in

aligning management compensation incentives with shareholder wellbeing (Fortin et al., 2014). It has been shown that, in fact, managers do make decisions that align with their risks, incentives, and personal gain. Managers also avoid the risks that are inherent with violating the codes of laws, and regulations that pertain to these disclosures. Further, managers do take actions that enrich themselves when that action does not violate securities laws or expose them to litigation risk (Huddart et al., 2007).

Disclosure is not a riskless activity. Managers are heavily scrutinized in the disclosures they make or carefully watched for inaccuracies and embellishments that may influence investor decisions. They are also evaluated for omissions that should have been disclosed but were delayed in being revealed to the public. Alternatively, there are times when over disclosure is problematic for the firm, for managers, and for investor well-being, firm value, if managers disclose what may be value relevant information. Investors would like to know this value relevant information so that they can make better valuation decisions (Houston et al., 2019). Unfortunately, such a disclosure may unwittingly or unintentionally provide a competitor with the very information that they need to better compete against the disclosing firm. This presents the managers with a different kind of risk that is inherent to the disclosure process.

Disclosure of competitive advantages and weaknesses is often the very reason that managers put forward, or at least one of the excuses that managers use, to oppose a disclosure being made mandatory. Managers argue that the disclosure would contain proprietary competitive advantage information that should not be disclosed openly and should only be accessible to insiders. For a public firm, information being privy to insiders means that it should only be shared with individuals that have insider access to the firm. These insiders, whose

trading activities are restricted, are given this information and thus the privileged information does not become public information, nor can it be widely used to the trading activities of insiders. Using insider information to make trading decisions that result in advantageous returns is illegal and called insider trading. Insider trading can result in prosecution by the SEC and fines encompassing the entire gain, or reduction of losses, that resulted from use of confidential information to make advantageous trades. As such, managers adjust their trading and disclosure activities to avoid prosecution or litigation related to their trading activities as insiders (Cheng & Lo, 2006). Any disclosure made to, other than insiders, is required to be divulged to all public parties, and be accessible by the public.

2.5. Signals

A signal is a solution to this dilemma that neither exposes a manager to litigation risk or to the risk of disclosing competitive advantages. Gonedes (1978) says, "Corporate signaling entails managements' behaving as if they are providing observables with which agents can make inferences about unobservables." A signal is not a disclosure. A signal is an observable action taken that implies something about unobservable information. A signal may accompany identifiable information, but there is implied in the disclosure the signal that something is true, that something should be given attention, or that something is important. This allows managers to indicate and/or direct the attention of investors to information that managers would like them to emphasize in their valuation of the firm. Managers being motivated to their own wellbeing may drive them to abuse this situation by directing the attention of investors in a way that is deceptive. However, as no information has been disclosed, and truly the indications have only been hints as to where managers would like attention to be given.

The cost of a signal is an important facet to explore and discuss. FSO and FSM are signals that do not have a large initial cost associated with their expression. With FSO, managers can change the order of presentation with no material change in costs. FSM does require additional time developing the discussion that results in FSM. However, this discussion is likely necessary to effectively communicate about the financial statements. As such, the signal doesn't likely have a stand-alone cost beyond the cost of compiling the 10-K. There may be a cost associated with a deceptive FSO or an FSM that does not adequately match the financial reporting environment. However, it would be difficult to ascertain the ex-post costs associated with these signals.

Signals avoid the litigation risk inherent in the disclosure process, but do not avoid the judgement that may attend an improperly used signal. Using signals, managers do not disclose information about competitive advantages. Managers do not have the ability to make inaccurate statements through a signal because no statement is being made. As such, these signals allow managers to completely avoid disclosure risk outside of loss of reputation, which is likely very low in this setting.

The dividend signal is one of the best-known signals among investors. For many decades, it was understood to indicate the longevity of a firm and its cashflows. If a firm was paying dividends, that firm is expected to have persistent income sufficient to continue paying that dividend (Benartzi et al., 1997). In theory, the longer firms paid that dividend the surer the continuation of the dividend. While there is a disclosure inherent with the dividend announcement, there is a signal that accompanies that disclosure.

The implication that attends the dividend announcement is an understanding that is held by investors that when management takes a certain action that there is implied in that action an expectation for the future of the firm. If true, this expectation should affect how investors should make decisions about the valuation of the firm. The dividend signal was shown in the 1970's to not be a strong indicator of future income, cashflows, or returns (Black & Scholes, 1974; Watts, 1973). I propose that FSO and FSM are in some sense signals that have not been extensively studied. As there is a normal FSO, investors may expect financial statements to be presented in an order that follows this norm.

Deviation from the typical financial statement order may allow managers to indicate their opinion of where investors should place their attention, where they should spend their time when evaluating the firm's value, which may impact the firm's share price. This exposes the firm to no disclosure risk since no disclosure is made. The FSO signal might allow managers to help investors understand what in the financial statements is of significance to comprehending the future value of the firm. Alternatively, this signal could be used as a manipulation of investor attention directing them to focus on transitory income to make their valuation decisions.

Additionally, FSM could also be used to signal the importance of a financial statement's information. The lengthier discussion and detailed analysis of the financial statement could be a revelation of management's opinion that this financial statement in question is of particular importance. However, the discussion of the financial statements may be driven by necessity rather than be management choice. The complexity of information revealed in the financial statement may require a lengthier discussion. Bad news may also require additional explanation,

particularly if management is of the opinion that the bad news is transitory in its effects of the financial wellbeing of the firm.

FSO and FSM signals would be difficult to abuse. While these signals could be used to direct investor attention away from negative information and toward positive information, any benefit garnered from this abuse would likely be mitigated by sophisticated investors.

Additionally, the analysts that investors rely on to decipher the extensive disclosures being made by the firm would also likely see through any manipulation by managers.

3. Hypothesis Development and Research Design

The income statement being placed first in the financial statement order could be a signal that income statement information is of greater importance in understanding firm value. Management could be revealing that income statement information is of particular importance to the value of the firm. Alternatively, this might direct the attention of the investors to focus on the income information and may anchor them to that information as the basis of their valuation determination even though there is nothing of abnormal importance in income to the value of the firm. Additionally, I look at the extent of discussion of the income statement as a signal about financial statement information. Studying these signals is a good first step in understanding the many signals that might be given through FSO and FSM. In order to better understand the impact of these signals, I explore the following two research questions: Are managers revealing information by making these signals? Are investors responding to the signal?

Before stating my hypotheses, I first explore the firm characteristics that are associated with FSO and FSM signals. I do this using descriptive statistics and with regression analysis using FSO and FSM proxies as dependent variables and independent variables including firm age, size, earnings, change in earnings, operating cashflows, sales, change in sales, absolute accruals, and market to book as shown below in Model 1. I analyze firm-year observations in a loss condition separately from firm-year observations in a non-loss condition to allow for differences in coefficients between profit vs. loss firms. Because this analysis is exploratory, I have no predictions of the signs of the coefficients.

$$\text{Model 1: } \text{Signal}_{j,t} = \alpha_0 + \alpha_1 \text{age}_{j,t} + \alpha_2 \text{size}_{j,t} + \alpha_3 \text{earn}_{j,t} + \alpha_4 \Delta \text{earn}_{j,t} + \alpha_5 \text{ocf}_{j,t} + \alpha_6 \text{sale}_{j,t} + \alpha_7 \Delta \text{sale}_{j,t} + \alpha_8 |\text{accruals}|_{j,t} + \alpha_9 m/b_{j,t} + \varepsilon$$

As a proxy for FSO, I employ an indicator variable, IS1, that takes a value of 1 when the income statement appears first in the financial statement order, 0 otherwise. This measure captures the prominence placed on the two financial statements that appear in the first two positions for most firms. As a proxy for the extent of discussion of financial statements, FSM, I use the number of times the income statement was mentioned divided by 100, ISc, in the 10-K filing.

3.1. Earnings Persistence

Next, I explore whether managers reveal value-relevant information about earnings with the placement of the income statement first in the financial statement order and with the extent the income statement is discussed in the 10-K. Because managers are incentivized to increase firm valuation, and thereby investor wellbeing, managers try to reveal sufficient information to the market to justify firm value. If managers want to place emphasis on the

income statement because they believe it is more value relevant, one way to do this is to place the income statement first in the financial statement order. Firms may place the income statement first either because of the increased relevance of income statement information, which should be reflected in earnings characteristics, notably the persistence of earnings. Not all value relevant information can be revealed without risking firm value through exposure of competitive advantages. This necessitates some method for the market to receive information relative to the reliability accounting information possesses to reflect firm value. Signals are an appropriate method by which managers can communicate the reliability of accounting information without exposing competitive advantages. Of particular concern to investors, earnings is an estimation of the economic returns generated by the firm and ultimately of cashflows. I predict FSO and FSM signals contain information about the usefulness or earnings.

I expect that companies that place the income statement first will have higher earnings persistence and that the placement of the income statement before other statements conveys information to financial statement users. Because FSM could be driven by a desire to emphasize information or due to complexity, it is an empirical question whether the extent of discussion of the income statement results in higher persistence (consistent with increased emphasis) or lower persistence (consistent with more complex earnings with transitory components that need additional discussion).

H1a - Earnings reliability is higher for firms that place the income statement first in the order of financial statements.

H1b – Earnings reliability is not associated with the number of times the income statement is mentioned in the 10-K.

One aspect of reliability is the tendency of earnings to persist in the future. Earnings persistence is estimated as a regression of future earnings on current earnings. I include an interaction between the FSO and FSM proxies to assess their impact on the persistence of earnings as shown in Model 2

$$\text{Model 2: } Earn_{j,t+1} = \alpha_0 + \alpha_1 Earn_{j,t} + \alpha_2 Signal_{j,t} + \alpha_3 Earn_{j,t} * Signal_{j,t} + \varepsilon$$

I estimate the persistence of earnings and include and interactions with FSO signal indicator IS1 to see if managers are providing useful information to investors by placing the income statement first. If managers are being informative, I expect to find a positive effect on the persistence of earnings associated with the IS1 signal. Alternatively, a negative association might indicate that managers are being deceptive in making these signals. I also use the FSM proxy ISc as a signal of the information content in a financial statement, specifically the income statement. This measure could capture management emphasis of the income statement and the interaction might result in higher persistence. On the other hand, because information complexity and bad news may drive the necessity to discuss the income statement more, there is potential for a negative association. Therefore, I do not predict an expected sign for the coefficients involving the FSM signal ISc.

3.2. Valuation

If the FSO and FSM signals contain information about earnings reliability, this should be incorporated by the market into the valuation of firms. The SEC regulates the disclosure and

prominence given to accounting information in the 10-K. Additionally, expectations are known to affect individuals' attention (Doherty et al., 2005). Accounting settings are susceptible to limited attention and anchoring (Joyce & Biddle, 1981; Butler, 1986; Hirshleifer & Teoh, 2003; Hirshleifer et al., 2011). Investors can be influenced by the prominences that information is given. IS1 and ISc are measures of the prominence given to income information. If FSO and FSM signals are associated with earnings reliability, I expected that an efficient market would incorporate this information when valuing a company. Following the logic of H1a, which predicts that earnings are more persistent when the income statement is placed first, earnings should also receive more weight by market participants in valuation. Similarly following the logic of H1b, the extent of discussion of the income statement could be related to either management desire to emphasize information or to complexity of earnings including transitory components; there is not a clear prediction of the impact of ISc on persistence, and thus there is not a clear prediction on the weight earnings should receive in valuation. I state the valuation hypotheses as follows:

H2a – The relevance of earnings in the valuation of stock price is higher for firms that place the income statement first in the order of financial statements.

H2b – The relevance of earnings in the valuation of stock price is not associated with the number of times the income statement is mentioned in the 10-K.

Value relevance research explores the relevance of information to firm value. This is accomplished by regressing share price on earnings per share and firm book value per share. I

adjust this model to include the signals and interactions between the signals, eps, and book value per share as seen in Model 3 below.

$$\text{Model 3: } price_{j,t} = \beta_0 + \beta_1 eps_{j,t} + \beta_2 BV_{jt} + \beta_3 Signal_{j,t} + \beta_4 eps_{j,t} * Signal_{j,t} + \beta_5 BV_{jt} * Signal_{j,t} + \varepsilon_{j,t}$$

In this regression, I evaluate the relationship between the relevance of earnings to firm valuation and these signals. This is accomplished with an OLS estimation of Model 3. Price is regressed on EPS, BV, either IS1 or ISc, and interactions between IS1 or ISc and the original components of the value relevance estimation (EPS and BV) following Ohlson (1995). This test assesses the relevance of earnings and book value to market prices. I expect that value relevance will have the same sign as the persistence estimation for both FSO and FSM signals. Following Banker et al. (Banker et al., 2009), I restrict the sample to observations with studentized residuals less than three standard deviations and a Cook's D of less than or equal to one.

3.3. Earnings Response Coefficient

The earnings response coefficient research has the “methodological motivation [...] to facilitate the design of more powerful tests of [...] signaling hypotheses in accounting.” Further, the ERC has been shown to be associated with disclosure activity (Lundholm & Myers, 2002). The ERC is estimated by regressing abnormal returns on unexpected earnings. This allows researchers to better understand the market as it evaluates unexpected earnings and determines how those earnings should be relied on while determining firm value. If earnings are considered unreliable or transitory, they will be less likely to influence the ongoing value of

the firm. Alternatively, if earnings are reliable and persistent, they will be more likely to be associated with an increase in firm value. I expect IS1 to be positively associated with the earnings response coefficient consistent with the logic in H1a and H2a. I do not make a directional prediction for ISc because it is not clear whether the extent of discussion of the income statement is attributable to management emphasis or to earnings complexity.

H3a – The investor response to earnings is higher for firms that place the income statement first in the order of financial statements.

H3b – The investor response to earnings is not associated with the number of times the income statement is mentioned in the 10-K.

In order to incorporate the signals IS1 and ISc, I adjust the ERC model as shown in Model 4 in a pooled regression with industry and year fixed effects. I regress returns on eps, signals, and interactions between signals and eps to evaluate whether these signals influence how earnings are valued by the market. Because I scale eps by price for this analysis and to avoid confusion with the value relevance analysis, I refer to this measure as roi. A positive interaction between roi and the income statement signals would indicate that investors place a greater weight on earnings when making valuation decisions connected to the signals. A negative coefficient would show that earnings information is being incorporated into firm value less than when the signal is not present. I propose that anchoring and limited attention effects with FSO and FSM may play a role in the reaction to earnings. I estimate the following regression and following Barth et al. (2013), I exclude any observations with scaled eps above 1.5 or less than -1.5 to eliminate the effects of outlier observations.

$$\text{Model 4: } Returns_{t,j} = Signal_{t,j} + roi_{t,j} + roi_{t,j} * Signal_{t,j} + \varepsilon$$

3.4. The XBRL Mandate

The SEC began requiring the use of XBRL for the submission of financial statement data to be made available on the SEC website using phased-in rules from June 2009 to June 2011. This changed the process of acquiring financial statement data for investors. Instead of reading the 10-K and accessing the data from the filing, investors can now use software to import the data from the SEC servers via the XBRL data. This makes that data much more accessible and available for algorithmic analysis. This could mitigate the effect of the effects on investor attention in the reaction to earnings that I have discussed because investments can be more efficiently monitored and the order in which financial statements are presented may be less likely to be observed by investors who may refer less to the 10-K filing itself in favor of other summaries of financial statement data facilitated by XBRL. Thus, the order may have a lower impact on the perceptions of individuals. I expect that when XBRL data is available for a given firm-year observation the effects of the income statement signals on ERC will be lower.

H4 – The effect of FSO and FSM on the investor response to earnings is mitigated by the availability of XBRL data.

I test this hypothesis by altering the test for Hypothesis 3 as shown in Model 5. I add XBRL, a dummy variable indicating the availability of XBRL data, and interact XBRL with earnings to assess the impact of XBRL on the role of FSO and FSM on the investor response to earnings. I expect the interactions between XBRL, roi, and the FSO and FSM proxies will demonstrate a weakened impact of FSO and FSM on the response to earnings.

$$\text{Model 5: } Returns_{t,j} = Signal_{t,j} + roi_{t,j} + roi_{t,j} * Signal_{t,j} + xbrl_{t,j} + xbrl_{t,j} * Signal_{t,j} + xbrl_{t,j} * Signal_{t,j} * roi_{t,j} + \varepsilon$$

4. Data

I use data that has been extracted from 10-K filings on the SEC's Edgar database. The data is extracted using textual analysis that determines when financial statements are being discussed in the 10-K. The use of textual analysis enables the rapid extraction of a large number of financial statement orders and mentions, providing a FSO and FSM measures for a much larger dataset than has been used in the past. This is enabled by use of regular expressions that allow classification of many variations of financial statement names used by companies that can then be used to determine the financial statement order. This is necessary because the naming conventions of the accounting statements are not uniform even though they are governed by the same set of rules. For instance, "Statement of Operations" and "Income Statement" are commonly used by firms for the income statement, and firms may include permutations with additional terms such as "consolidated" and may alter the order of the words. It is unclear why firms select one naming convention over another, but this one possible avenue for future research. For this study, it is important to be able to correctly recognize various patterns of text as equivalent to correctly identify statements.

The data was manually validated with a random sample of 731 observations to compare the extracted financial statement order with the order found in the 10-K filings. The order extracted with the algorithm agreed with the actual order 99% of the time, providing confidence that the extracted financial statement order used in my research is reliable. This

dataset is then merged with COMPUSTAT and CRSP data to conduct analysis. I exclude banks and other regulated industries by removing firms with a SIC code between 5000-6999. I also exclude firm-year observations with average assets under \$100 Million. In addition, observations without necessary data are excluded. I use the maximum number of observations available for each test. Other exclusions based on regression diagnostics are discussed in greater detail in the preceding hypothesis development section.

5. Results

5.1. Initial Findings

I begin with descriptive statistics as financial statement order and financial statement mentions have not been studied with a sample larger than 400 observations. I find that 59.2% of firm-year observations have a financial statement order of BISC. The next three FSOs are IBCS, BICS, and IBSC, occurring in 14.5%, 12.3% and 11.6% of firm-year observations, respectively, as shown in Table 1. Other FSOs do not occupy a significant portion of the sample. Figure 1 illustrates the mix of FSOs and demonstrates that the mix has been relatively stable over the last couple decades with BISC maintaining the greatest proportion over the entire sample period. IBCS, BICS and IBSC maintain a relatively significant proportion of the sample as well. Other FSOs, are not a significant portion of the sample and seem to be reducing in their frequency.

Table 2 shows the descriptive statistics of relevant variables. Of particular importance are IS1 (income statement appears as the first statement in the FSO) and ISc (number of times the income statement is mentioned in a 10-K filing divided by 100). The income statement

appears first in 28.3% of firm-year observations (the mean value of IS1 is 28.3%). ISc has a mean value of .28, which corresponds to 28 mentions of the income statement; the (25th) 75th percentile of ISc is (0.1) 0.34, corresponding with or (10) 34 income statement mentions.

I report correlations of select variables in Table 2.b. Correlations may provide an indication of the relationship between FSO and FSM proxies. This can be observed by checking the correlation between the Income statement position variable, IS1, and the income statement mentions variable, ISc. The results show that IS1 and ISc have a correlation coefficient of 0.039, which is statistically significant but low in magnitude suggesting these two measures capture very different aspects of a company's financial reporting. Further analysis is needed to determine how these two measures are associated with earnings and valuation characteristics.

5.2. Comparison of Firms with Balance Sheet vs. Income Statement First

Next, I analyze the firm characteristics that are associated with the occurrence of various signals. I begin with balance sheet being placed first in the FSO. Table 3.a presents descriptive statistics of the portion of the sample that has balance sheet first in the FSO, referred to as BS1 firms for parsimony, and Table 4.a presents descriptive statistics for the portion of the sample with the income statement first, referred to as IS1 firms for parsimony. The results in these two tables show that there are differences between firms that place the balance sheet vs. income statement first with firms with the income statement first having greater earnings, income statement mentions, cashflows, sales, sales growth, and assets but lower loss frequency and accruals. I discuss differences in greater detail next.

The mean price for firms that place the balance sheet first is 52.702 as vs. a mean price for firms that place the income statement first being 40.581, but the median price of 18.5 for BS1 firms is lower than the median price of 29.96 for IS1 firms. The mean ISc is .271 for BS1 firms vs. and .301 for IS1 firms, yet the median ISc is .19 for both. Log of assets has a mean of 3.575 and a median of 3.468 for BS1 firms and a mean of 4.208 and median of 4.175 for IS1 firms. Earnings have means of -.001 and .042 and medians of .026 and .045 for BS1 and IS1 firms respectively. Sales divided by assets for BS1 and IS1 firms have means of .85 and .957 with medians of .722 and .878 respectively. Sales growth shows a mean of .115 for BS1 firms and .292 for IS1 firms, with medians of .023 and .058 respectively. Absolute accruals have a mean of .092 and median of .065 for BS1 firms and a mean of .067 and a median of .051 for IS1 firms. Losses occur in 30.1% of observations in BS1 firms and 17.3% of IS1 firms. Market-to-Book has a mean of 2.091 and a median of 1.451 for BS1 firms and a mean of 1.807 and median of 1.451 for IS1 firms.

5.3. Determinant Model for BS1

I explore the determinants of whether the balance sheet is first in the FSO by using a dummy variable BS1, which takes a value of 1 if the balance sheet is first in the FSO and 0 otherwise. I estimate Model 1 using logistic regression analysis. This analysis is done cross-sectionally for non-loss and loss firm-year observations separately to allow for different coefficients for firms in loss and non-loss situations. I estimate the regressions with and without industry and year fixed effects. The results are presented in Table 3.b and I focus on the results in column (3), which are for non-loss firms, including fixed effects for brevity.

The results in Table 3.1 show that larger firms are less likely to have BS1 status; log of assets has a coefficient of -1.262 (standard error .026). BS1 firms also have lower sales, with a coefficient of -.303 (standard error .033). Sales growth, on the other hand, is positively associated with BS1, *ceteris paribus*, having a coefficient of .597 (standard error .067); this result differs from the comparison of descriptive statistics where sales growth was larger for IS1 firms. Absolute value of accruals is significant and positive only in non-loss observations with a coefficient of .708 (standard error .286). Age is negatively associated with BS1 with a coefficient of -.021 (standard error .004). Other control variables in the model are either insignificant or vary in sign and magnitude across estimations.

5.4. Determinant Model for IS1

Next, I discuss the results of the determinant model for IS1. The results are presented in Table 4.b and I focus on the results in column (3), which are for non-loss firms including fixed effects. Since BS1 and IS1 comprise over 99% of the sample and that they are mutually exclusive conditions, it is unsurprising to find that the results and inferences seen in Table 4.b are the opposite of the BS1 results in Table 3.b. Log of assets and sales are positively and significantly associated with IS1. Log assets has a coefficient of 1.257 (standard error .026). The sales coefficient is .304 (standard error .033). Sales growth is negatively and significantly associated with IS1 with a coefficient of -0.735 (standard error .082). Age is positively associated with IS1 with a coefficient of .022 (standard error .004). Finally, the absolute value of accruals is negatively associated with IS1 having a coefficient of -.721 (standard error .286).

Overall, the results from Table 3.b and Table 4.b suggest that larger, older firms with small accruals and large sales are most likely to place the income statement first in the financial statement order. In contrast, younger, smaller, faster growing firms are more likely to report the balance sheet first, which is more common.

5.5. Determinant Model for ISc

Finally, I estimate the determinant model with ISc as the dependent variable, the number of times the income statement is mentioned in the 10-K for a given firm-year divided by 100, using an OLS estimation. The results are presented in Table 5, and I focus on the results in column (3), which are for non-loss firm-years, including fixed effects. The results suggest that firms discuss the income statement more when they are large, there is a large change in income, sales are large and less likely to discuss the income statement when the level of earnings and cash flow are large and when the market-to-book ratio is high. I discuss specific results in the following paragraph.

The coefficient for log of assets is significant and positive with a value of .063 (standard error .003). Earnings has a significant negative coefficient for the non-loss condition in column 3 with a coefficient of -.167 (standard error .031), but no significant association for the loss condition in column 4. Change in earnings is significant and positive in the non-loss condition in column 3 with a coefficient of .043 (standard error .01), but insignificant in column 4 for loss firms. OCF is negative and significant in the non-loss condition with a coefficient of -.208 (standard error .027). Market-to-book has a significant and negative coefficient with a coefficient of -.004 (standard error .002).

5.6. Testing Hypothesis 1

Next, I turn to the results of the tests of Hypothesis 1. Hypothesis H1a states that “earnings reliability is higher for firms that place the income statement first in the order of financial statements.” I expect differences in earnings reliability will be associated with the placement of the income statement. In particular, I expect that IS1 will be associated with an increase in the reliability of earnings. A positive association between IS1 and earnings reliability would provide evidence of information content in the choice of management to place the income statement first and may indicate an effort by managers to reveal information to investors.

Next, Hypothesis H1b states that “earnings reliability is higher for firms that place the income statement first in the order of financial statements.” I test this hypothesis using ISc, which is a measure of the frequency with which the income statement is discussed in the 10-k of a firm in a given year. ISc could reflect efforts by managers to emphasize the income statement for users of financial statements in their evaluation of the ongoing operations of the firm. If this is true, my expectations are that there would be a positive association between ISc and earnings reliability as with IS1. However, increased discussion of the income statement may reflect the necessity to discuss the income statement as a result of information complexity or bad news. This could cause managers to discuss the income statement more. If this is the case, earnings usefulness may be negatively associated with ISc.

The testing of these hypotheses is done by evaluating the impact of IS1 and ISc on the persistence of earnings by including these measures as interactions in Model 2. This tests H1a

and H1b by observing how IS1 and ISc impact the persistence of earnings, which is my proxy for earnings reliability.

As shown in Table 6, I find that IS1 is associated with an increased persistence of earnings with coefficients in column (3) of .187 in the interaction between IS1 and eps (standard error.033). This shows the expected association between IS1 and earnings reliability. Further, this association gives evidence that managers may be revealing information that is useful to investors through this signal. This evidence is consistent with the prediction of H1a and I therefore reject the null hypothesis that no association exists between earnings reliability and income statement placement.

The test of H1b is shown in column 2 of Table 6. The coefficient on the interaction between ISc and earn is negative and significant with a value of -.478 (standard error.037). This provides evidence that the ISc signal is associated with a reduction in earnings reliability, consistent with ISc reflecting earnings complexity rather than a desire of management to emphasize the income statement. Additional testing would be needed to understand what specifically causes managers to decide to discuss the financial statements. Independent exploration with each of FSM and FSO may be warranted.

The results in column 1 of Table 6 show the estimation of Model 2 including both ISc and IS1 in the same regression. Inferences are unchanged in this combined model, with a significantly positive incremental effect of IS1 on earnings persistence, and a significantly negative incremental effect of ISc on earnings persistence.

5.7. Testing Hypothesis 2

Hypothesis 2a states that “the relevance of earnings in the valuation of stock price is higher for firms that place the income statement first in the order of financial statements.” Earlier, I suggest that the directionality of this signal would follow the evidence on earnings reliability. Because H1a shows that earnings reliability is positively associated with IS1, I expect IS1 to be positively associated with earnings relevance for valuation.

Hypothesis 2b is that “the relevance of earnings in the valuation of stock price is not associated with the number of times the income statement is mentioned in the 10-K.” While this hypothesis is stated as non-directional. I expect ISc to be associated with the relevance of earnings to valuation in the same way that is with earnings reliability. Because tests of H1b show a negative impact of ISc on persistence, I expect ISc will be negatively associated with the relevance of earnings with valuation.

I test the impact of IS1 and ISc on value relevance using Model 3. I present the results of this estimation in Table 7. I focus on the results of the interactions involving IS1 and ISc since those are the coefficients that reveal the effects of these signals on the value relevance of earnings and book value to share price.

Table 7.a presents the results of estimating Model 3 using IS1. The results in column 1 show that the coefficient for the interaction between eps and IS1 is positive and significant with a value of 3.033 and a standard error of .113. This result is consistent with the prediction of H2a and with the results of H1a discussed in the preceding section. This suggests that the relevance

of earnings is positively associated with the choice by management to place the income statement first in the financial statement order.

I also estimate the impact of ISc on the value relevance of earnings and present the results in Table 7.b. The results of the regression show a significant and negative associations with a value of $-.874$ and a standard error of $.15$. This rejects H1b's non-directional claim and finds an association that is negative. This is consistent with the findings of H1b that ISc has a negative impact on the persistence of earnings; this test confirms that this also has an impact on the value relevance of earnings in predicting stock price.

Finally, I estimate the IS1 and ISc signals in a composite model shown in Table 7.c. This shows an overall negative association with ISc, -1.745 with a standard error of $.149$, and positive association with IS1, 3.263 with a standard error of $.116$. These findings are consistent with results presented in Table 7.a and Table 7.b. Another interesting finding shown in all three panels is that the valuation weight on book value exhibits the opposite effect predicted in H2a and H2b. In particular, the interaction between IS1 and book value is negative, and the interaction between ISc and book value is positive, suggesting a shift in valuation weights associated with the FSO and FSM financial reporting characteristics.

These results align with the assertions of H2a and H2b that the relevance of earnings is associated with the income statement presentation order and financial statement mentions and that the market will value firms consistent with the reliability of earnings. The distinct results seen with IS1 and ISc gives support that these income statement signals, IS1 and ISc, are unique.

5.8. Testing Hypothesis 3

Next, I turn to tests of H3a, which states that “the investor response to earnings is higher for firms that place the income statement first in the order of financial statements.” Similarly, H3b states that “the investor response to earnings is not associated with the number of times the income statement is mentioned in the 10-K.” I test hypothesis H3a and H3b by estimating the effects of the IS1 indicator on the ERC estimation. I expect earnings response to be associated with the IS1 and ISc in the same direction as the earnings relevance to valuation and the earnings usefulness from hypotheses 1 and 2.

I test various time periods to best understand the short- and long-term effects of IS1 and ISc on the response to earnings. As shown in Table 8.a, which estimates Model 4 with IS1 interacted with earnings. I find that IS1 does not have a significant effect on the ERC coefficient except in the five days immediately following the release of the 10-K, with a coefficient estimate of -.014 with a standard error of .007. This coefficient is significant at the 95% confidence level without industry and year fixed effects but is reduced to a 90% level when fixed effects are included. Overall, the tests shown in Table 8.a do not provide evidence to support the idea that the income statement being place first is associated with an increased response to earnings around the release of the 10-k. I cannot reject the null hypothesis in this case.

Table 8.b contains the results of a similar estimation for ISc. I find a negative and significant association between ISc and the returns response for earnings in future periods with coefficients for the forward one year of -.358, standard error .085, and forward five-day coefficients of -.028 with standard error of .01. I can reject the hypothesis of non-association

and, again, find that there is a negative relationship with ISc and investor earnings response for future returns.

These findings consistent with those presented in Table 8.c, which includes both IS1 and ISc in the same regression. IS1 continues to show an insignificant interaction between IS1 and earnings while ISc negative and significant coefficients for future periods. Overall, these results provide some evidence that ISc does change the way investors respond to earnings, particularly going forward while there is no evidence in the contemporaneous days and months (one day or month before to 1 day or month after the 10-k filing) for either ISc or IS1. As such, I do not reject the null hypothesis for IS1, but I reject the null hypothesis for ISc for periods following the filing of the 10-K.

5.9. Testing Hypothesis 4

Hypothesis 4 states that “the effect of FSO and FSM on the investor response to earnings is mitigated by the availability of XBRL data.” I expect the availability of XBRL data will results in the effects of IS1 and ISc on the earnings response will be mitigated. This could be attributable to a reduced need to refer to 10-K filings as XBRL data facilitates review and extraction of information without the 10-K.

Table 9 displays the results of the estimation of Model 5, which adds an additional interaction with a dummy variable XBRL to Model 4, which was used to test Hypothesis 3. XBRL is an indicator variable taking a value of 1 if XBRL data is available for that filing, 0 otherwise. The results of interest are related to future returns for ISc in columns 5-8 for the interaction of $ISc_{j,t} * roi_{j,t} * xbrl_{j,t}$. I find that the significant and negative coefficient for future periods

attached to the ISc interaction with roi is reversed when interacted with XBRL. ISc interacted with roi for the forward one year has coefficients of $-.735$ and $-.756$ with standard errors of $.138$ and $.141$. This is offset by the presence of XBRL data with changes of $.97$ and 1.106 with standard errors of $.182$ and $.186$. A similar effect is observed with the five-day forward window begins with ISc interacted with roi having coefficients of $-.06$ and $-.059$ with standard errors of $.021$ and $.02$ that are offset by $.06$ and $.059$ with standard errors of $.021$ and $.02$ when XBRL data is available.

This provides some evidence that XBRL data allows investors to process data while being influenced by the discussion of that data. I do not find an association between IS1 in either hypothesis 3a or in hypothesis 4. As such, I find some evidence consistent with Hypothesis 4 though additional exploration of the data is needed. Overall, it is striking that I find that the ERC is also offset by the availability of XBRL data for periods following the filing of the 10-K

5.10. Additional Analysis

In additional analysis, I explore the impact of XBRL availability on persistence and value relevance by estimating association with the IS1 and ISc, repeating the analysis of hypotheses 1 and 2 by time period, pre-XBRL and post-XBRL. I do this to explore any potential impact of XBRL on the placement of the income statement in the financial statement order and the extent to which it is discussed.

Table 10.a shows the estimation of Model 2 interacting IS1 and ISc in the earnings persistence model. In the pre-XBRL period in column 3, the impact of IS1 on earnings persistence is positive, with a coefficient of $.158$ with standard error of $.048$. The coefficient is

also significant post-XBRL as seen in column 6 with a coefficient of .085, standard error .028.

Columns 2 and 5 show that ISc has a negative impact on earnings persistence in both time periods with an estimated coefficient in the pre-XBRL period of model of -.488, standard error .047, and a coefficient of -.348, standard error .042 in the post-XBRL period.

Additionally, Table 10.b shows that the value relevance associations of IS1 is positive in both the pre-XBRL and post-XBRL periods. In the pre-period shown in column 1, the coefficient of the interaction between IS1 and earn is 2.392 with a standard error of .119 and is 1.728 in the post-XBRL period with a standard error of .255. is 1.749, standard error of .459, before XBRL and 6.225, standard error 1.263, after XBRL. The results also show that ISc is negatively associated with the value relevance of earnings in both periods with a negative coefficient of -2.218, standard error .159 in the pre-XBRL period vs. -4.658, standard error .324 in the post-XBRL period. This analysis shows similar associations between IS1 and ISc in both the pre-XBRL and post-XBRL periods.

6. Conclusion

In this study, I seek to understand the ways that managers communicate financial statement information; specifically, I explore whether financial statement presentation order and the extent of financial statement discussion in the 10-K are meaningful. The most common financial statement order of most companies places the balance sheet first, followed by the income statement, then the statement of stockholder's equity, with the cash flow statement being last. The balance sheet is placed first in over 70% of 10-K filings, with most remaining

filings reporting the income statement first. Filers that place balance sheet first tend to be small firms with lower revenue levels but with greater sales growth.

Use of a different FSO is one possible way firms can distinguish themselves from other firms. Firms that place the income statement first tend to be more established, have higher earnings, and smaller accruals. I expect managers to select a financial statement order to communicate information that is relevant to firm value.

Financial statement discussion is an important mechanism for managers to aid investors process information. These discussions can either be helpful to investors by attempting to emphasize information, or they may result in increased complexity, which could make information more difficult to process. I use financial statement mentions as a metric that may inform us of this complexity about the financial statements.

I find that financial statement order has a significant association with the reliability of income statement information. In particular, I find that the decision to place the income statement first in the financial statement order, IS1, is associated with increased earnings persistence, indicating managers are likely communicating useful information to investors through this financial statement order, FSO. I also show increases in value relevance associated with IS1 in that earnings receives a greater weight in valuation. The relationships evidenced in this study show that FSO is an important feature of the 10-K and that it warrants additional study. Other possible signals related to financial statement order could be studied to better understand the causes and effects of these decisions made by managers so that investors may avoid the potential pitfalls of both overweighing these signals and ignoring them. One

important signal that could be explored by future research is the decision to *change* the order of the financial statements. Additionally, these signals should be studied to help managers understand how to use them to effectively communicate financial statement information.

I show that the extent of discussion of the income statement, ISc, is associated with lower earnings persistence, lower earnings value relevance, and a negative association between future returns and earnings. This suggests that a distinct set of mechanisms drives the decisions surrounding how to discuss the financial statements as opposed to the order in which to present them. Identification and evaluation of these mechanisms will be an important next step in understanding the usefulness of these indicators of accounting information.

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8. Appendix A – Variables and Definitions

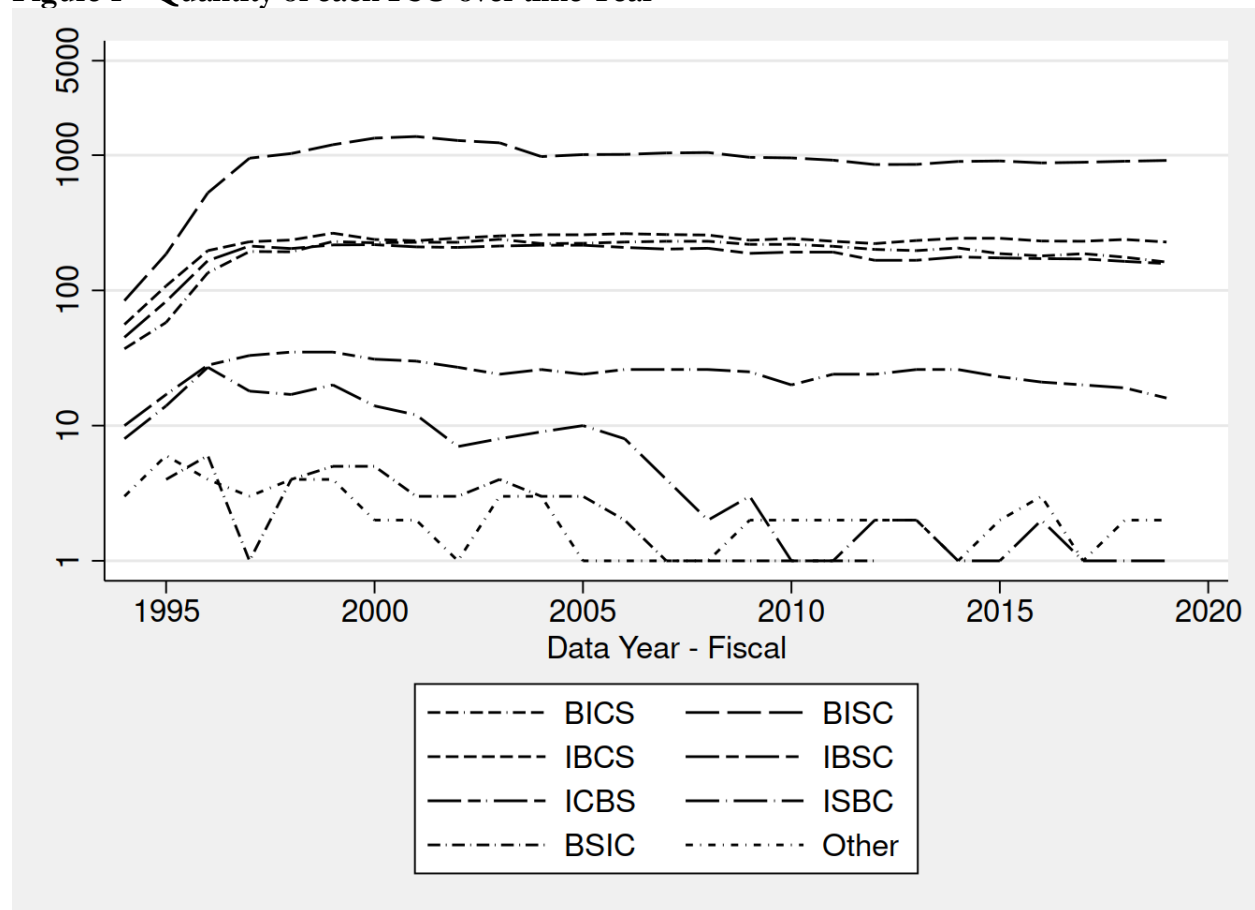
$IS_{j,t}$	1 if income statement is the first statement in the FSO in year t, 0 otherwise.
$ISc_{j,t}$	Count of income statement mentions in the 10-k of firm j in year t.
$BS1_{j,t}$	1 if balance sheet is the first statement in the FSO in year t for firm j, 0 otherwise.
$\log(at)_{j,t}$	$Log(\frac{Assets_{t-1} + Assets_t}{2})$
$earn_{j,t}$	Earnings for firm j in year t scaled by average assets
$\Delta earn_{j,t}$	Earnings for firm j in year t less Earnings in year t-1 scaled by average assets
$sale_{j,t}$	Sales for firm j in year t scaled by average assets
$\Delta sale_{j,t}$	Sales for firm j in year t - Sales in year t -1 scaled by average assets
$ocf_{j,t}$	Operating cash flows (OCF) for firm j in year t scaled by average assets
$ accruals _{j,t}$	Earnings in year t – OCF in year t for firm j scaled by average assets
$loss_{j,t}$	1 if earnings < 0, 0 otherwise for firm j in year t.
$eps_{j,t}$	Eps for firm j in year t (for the ERC estimation eps is scaled by price)
$m/b_{j,t}$	Market value/Book value for firm j in year t
$bv_{j,t}$	Book value per share for firm j in year t
$p_{j,t}$	Price per share of firm j three months following fiscal year t
$roi_{j,t}$	Eps scaled by price for firm j in year t
$ret_{j,t-f}$	Market returns for firm j from time t to time f
$age_{j,t}$	In year t, the numbers of years since firm j was originally listed

9. Tables and Figures

Table 1 – Proportions of Each FSO in the Sample

Order	Proportion
ISBC	.005
BSIC	.001
IBSC	.116
BISC	.592
ICBS	.016
IBCS	.145
BICS	.123
Other	.001
Observations	41058

Figure 1 – Quantity of each FSO over time Year



Note: Each line displays the quantity of each named FSO in each year. The Y-axis that displays quantity uses a logarithmic scale because of the large disparities between the top FSOs and the bottom FSOs that render it difficult to distinguish.

Table 2.a – Descriptive Statistics

	Obs	Mean	Std. Dev.	25 th Percentile	75 th Percentile
$p_{i,t}$	40770	49.254	1278.933	11	37.35
$eps_{i,t}$	41058	-197.005	40382.209	-.08	1.88
$bv_{i,t}$	40875	71.783	3615.654	5.07	15.734
$IS1_{i,t}$	41058	.283	0.450	0	1
$ISc_{i,t}$	40089	.28	0.336	.1	.34
$\log(at)_{i,t}$	41056	3.754	0.767	3.152	4.222
$earn_{i,t}$	41056	.011	0.154	-.005	.076
$\Delta earn_{i,t}$	40774	-.005	0.210	-.028	.022
$sale_{i,t}$	41055	.88	0.717	.421	1.19
$\Delta sale_{i,t}$	41057	.165	1.806	-.003	.13
$ocf_{i,t}$	38708	.078	0.122	.04	.137
$ accruals _{i,t}$	38708	.084	0.106	.032	.103
$loss_{i,t}$	41058	.265	0.441	0	1
$m/b_{i,t}$	40816	2.01	16.711	1.1	2.148

Table 2.b – Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) IS1	1.000										
(2) ISc	0.039***	1.000									
(3) l_at_a	0.372***	0.224***	1.000								
(4) earn_t	0.126***	-0.065***	0.173***	1.000							
(5) d_earn_t	0.005	0.001	0.000	0.292***	1.000						
(6) sale_t	0.067***	-0.073***	-0.137***	0.235***	0.016***	1.000					
(7) d_sale	0.044***	0.004	0.166***	0.060***	0.017***	0.054***	1.000				
(8) ocf_p0	0.100***	-0.058***	0.179***	0.678***	0.073***	0.231***	0.052***	1.000			
(9) abs_acc_t	-0.109***	0.020***	-0.126***	-0.573***	-0.223***	-0.062***	-0.028***	-0.033***	1.000		
(10) erc5d	0.005	0.007	0.009*	0.001	-0.001	0.002	0.000	0.006	-0.001	1.000	
(11) loss	-0.130***	0.125***	-0.196***	-0.619***	-0.136***	-0.152***	-0.068***	-0.475***	0.338***	0.004	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 3.a: Descriptive Statistics with BS1

	N	Mean	SD	p25	Median	p75
$p_{i,t}$	29189	52.7	1510.962	9.63	18.5	32.3
$eps_{i,t}$	29433	-2771.133	47694.567	-.24	.67	1.58
$bv_{i,t}$	29292	66.202	3321.242	4.583	8.481	13.917
$IS1_{i,t}$	29433	0	0.000	0	0	0
$ISc_{i,t}$	28751	.271	0.291	.11	.19	.34
$\log(at)_{i,t}$	29431	3.575	0.658	3.057	3.468	3.97
$earn_{i,t}$	29431	-.001	0.172	-.017	.026	.072
$\Delta earn_{i,t}$	29171	-.006	0.242	-.032	0	.024
$sale_{j,t}$	29430	.85	0.764	.366	.722	1.169
$\Delta sale_{j,t}$	29432	.115	1.182	-.001	.023	.095
$ocf_{j,t}$	27139	.07	0.136	.029	.084	.138
$ accruals _{i,t}$	27139	.092	0.118	.033	.065	.112
$loss_{j,t}$	29433	.301	0.459	0	0	1
$m/b_{i,t}$	29229	2.091	19.731	1.079	1.451	2.206

Table 3.b: Determinants of BS1

Method	(1)	(2)	(3)	(4)
	Logit		Logit	
Loss	0	1	0	1
age _{i,t}	.026*** (.002)	-.007 (.005)	-.021*** (.004)	-.047*** (.007)
log(at) _{i,t}	-1.128*** (.02)	-1.111*** (.039)	-1.262*** (.026)	-1.348*** (.053)
earn _{i,t}	-1.008*** (.254)	-1.068 (.708)	-.095 (.28)	-.751 (.858)
Δearn _{i,t}	-.002 (.076)	.153 (.115)	-.006 (.069)	-.057 (.125)
sale _{i,t}	-.313*** (.023)	-.671*** (.042)	-.303*** (.033)	-.529*** (.067)
Δsale _{i,t}	.901*** (.072)	.645*** (.083)	.736*** (.082)	.597*** (.105)
ocf _{i,t}	.664*** (.215)	-.309 (.658)	-.242 (.246)	-.138 (.802)
accruals _{i,t}	2.248*** (.256)	.053 (.718)	.708** (.286)	-.398 (.875)
m/b _{i,t}	.031*** (.012)	.239*** (.03)	-.017 (.011)	.099*** (.034)
Year FE	No	No	Yes	Yes
Industry FE	No	No	Yes	Yes
_cons	4.922*** (.089)	5.592*** (.17)	4.964*** (.332)	5.921*** (.594)
Obs	28420	12492	27299	11409

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 4.a: Descriptive Statistics with IS1

	N	Mean	SD	p25	Median	p75
$p_{i,t}$	11561	40.581	63.710	16.36	29.96	48.63
$eps_{i,t}$	11605	5.877	268.586	.41	1.46	2.69
$bv_{i,t}$	11563	86.022	4274.383	6.864	12.306	20.552
$IS1_{i,t}$	11605	1	0.000	1	1	1
$ISc_{i,t}$	11318	.301	0.430	.09	.19	.35
$\log(at)_{i,t}$	11605	4.208	0.832	3.579	4.175	4.768
$earn_{i,t}$	11605	.042	0.088	.015	.045	.081
$\Delta earn_{i,t}$	11583	-.003	0.090	-.021	0	.018
$sale_{i,t}$	11605	.957	0.577	.547	.878	1.233
$\Delta sale_{i,t}$	11605	.292	2.823	-.017	.058	.289
$ocf_{i,t}$	11549	.097	0.079	.058	.093	.134
$ accruals _{i,t}$	11549	.067	0.066	.029	.051	.083
$loss_{i,t}$	11605	.173	0.379	0	0	0
$m/b_{i,t}$	11567	1.807	1.274	1.155	1.451	2.016

Table 4.b: Determinants of IS1

	(1)	(2)	(3)	(4)
Method	Logit		Logit	
Loss	0	1	0	1
$age_{i,t}$	-.026*** (.002)	.007 (.005)	.022*** (.004)	.048*** (.007)
$\log(at)_{i,t}$	1.125*** (.02)	1.111*** (.039)	1.257*** (.026)	1.35*** (.053)
$earn_{i,t}$	1.015*** (.254)	1.067 (.71)	.106 (.28)	.739 (.862)
$\Delta earn_{i,t}$	.001 (.077)	-.172 (.117)	.005 (.069)	.039 (.124)
$sale_{i,t}$	.314*** (.023)	.674*** (.042)	.304*** (.033)	.528*** (.067)
$\Delta sale_{i,t}$	-.9*** (.072)	-.646*** (.083)	-.735*** (.082)	-.594*** (.106)
$ocf_{i,t}$	-.669*** (.215)	.299 (.66)	.221 (.246)	.143 (.805)
$ accruals _{i,t}$	-2.247*** (.256)	-.07 (.721)	-.721** (.286)	.378 (.879)
$m/b_{i,t}$	-.031*** (.012)	-.244*** (.03)	.016 (.011)	-.104*** (.035)
Year FE	No	No	Yes	Yes
Industry FE	No	No	Yes	Yes
_cons	-4.918*** (.089)	-5.592*** (.171)	-4.97*** (.331)	-5.934*** (.595)
Obs	28420	12492	27299	11409

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 5: Determinants of Income Statement Mentions, ISc, in the 10-K.

Method	(1)	(2)	(3)	(4)
	OLS		OLS	
Loss	0	1	0	1
age _{i,t}	.011*** (0)	.012*** (.001)	-.004*** (0)	0 (.001)
log(at) _{i,t}	.07*** (.003)	.104*** (.005)	.063*** (.003)	.106*** (.005)
earn _{i,t}	-.218*** (.031)	-.003 (.06)	-.167*** (.031)	.034 (.055)
Δearn _{i,t}	.048*** (.01)	.027** (.012)	.043*** (.01)	.008 (.011)
sale _{i,t}	-.033*** (.003)	-.012*** (.005)	.007* (.004)	.008 (.006)
Δsale _{i,t}	.028*** (.009)	.031*** (.009)	.004 (.008)	-.006 (.009)
ocf _{i,t}	-.189*** (.026)	-.038 (.057)	-.208*** (.027)	-.06 (.053)
accruals _{i,t}	.243*** (.031)	.021 (.06)	.152*** (.031)	.054 (.055)
m/b _{i,t}	0* (0)	.005*** (.002)	-.004*** (.001)	-.005*** (.002)
Industry FE	No	No	Yes	Yes
Year FE	No	No	Yes	Yes
_cons	-.024** (.012)	-.077*** (.018)	-.068 (.041)	-.042 (.297)
Obs	27680	12221	27463	12145
R-squared	.101	.104	.25	.296

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 6 – OLS estimation of the persistence of earnings and the interaction between earnings and IS1 and ISc

	(1) earn _{i,t+1}	(2) earn _{i,t+1}	(3) earn _{i,t+1}
earn _{i,t}	.34*** (.021)	.363*** (.021)	.123*** (.012)
earn _{i,t} * IS1 _{i,t}	.142*** (.034)		.187*** (.033)
IS1 _{i,t}	.002 (.004)		-.002 (.004)
earn _{i,t} * ISc _{i,t}	-.462*** (.037)	-.478*** (.037)	
ISc _{i,t}	.012*** (.004)	.012*** (.004)	
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
_cons	.018 (.027)	.021 (.027)	.03 (.026)
Observations	26252	26252	26960
R-squared	.04	.038	.034

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7.a – The Effects of IS1 on Value Relevance

Variable	(1) p _{i,t}	(2) p _{i,t}
eps _{i,t}	1.036*** (.056)	1.789*** (.05)
bv _{i,t}	1.152*** (.014)	1.111*** (.012)
IS1 _{i,t}	2.214*** (.487)	
eps _{i,t} *IS1 _{i,t}	3.033*** (.113)	
bv _{i,t} *IS1 _{i,t}	-.19*** (.024)	
Industry FE	Yes	Yes
Year FE	Yes	Yes
_cons	.46 (3.363)	1.432 (3.422)
Observations	27920	27920
R-squared	.5	.481

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7.b – The Effects of ISc on Value Relevance

Variable	(1) p _{j,t}	(2) p _{j,t}
eps _{j,t}	2.056*** (.072)	1.789*** (.05)
bv _{j,t}	1.036*** (.015)	1.111*** (.012)
ISc _{j,t}	-7.152*** (.742)	
eps _{j,t} *ISc _{j,t}	-.874*** (.15)	
bv _{j,t} *ISc _{j,t}	.237*** (.026)	
Industry FE	Yes	Yes
Year FE	Yes	Yes
_cons	3.026 (3.478)	1.432 (3.422)
Observations	27191	27920
R-squared	.483	.481

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7.c – The Effects of IS1 and ISc on Value Relevance

Variable	(1) p _{j,t}	(2) p _{j,t}
eps _{j,t}	1.553*** (.073)	1.785*** (.05)
bv _{j,t}	1.059*** (.016)	1.107*** (.012)
ISc _{j,t}	-6.007*** (.728)	
eps _{j,t} *ISc _{j,t}	-1.745*** (.149)	
bv _{j,t} *ISc _{j,t}	.28*** (.026)	
IS1 _{j,t}	2.064*** (.496)	
eps _{j,t} *IS1 _{j,t}	3.263*** (.116)	
bv _{j,t} *IS1 _{j,t}	-.206*** (.025)	
Industry FE	Yes	Yes
Year FE	Yes	Yes
_cons	1.626 (3.411)	1.481 (3.423)
Observations	27200	27930
R-squared	.505	.482

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8.a –Returns Response to Earnings and the interaction between earnings and IS1.

Return Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Start	-1	-1	-1 Day	-1 Day	+0	+0	+1 Day	+1 Day
End	Month	Month			Months	Months		
	+1	+1	+1	+1	+11	+11	+5	+5
	Month	Month	Day	Day	Months	Months	Days	Days
	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}
roi _{j,t}	.033*** (.01)	.029*** (.009)	.025*** (.003)	.028*** (.003)	.535*** (.03)	.449*** (.03)	.028*** (.003)	.029*** (.003)
IS1 _{j,t} * roi _{j,t}	.002 (.02)	-.003 (.02)	-.003 (.007)	-.005 (.007)	-.01 (.063)	.043 (.064)	-.014* (.007)	-.014** (.007)
IS1 _{j,t}	0 (.004)	-.008*** (.003)	.002* (.001)	.001 (.001)	.006 (.011)	-.032*** (.01)	.003** (.001)	.002 (.001)
Industry FE	Yes	No	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
_cons	-.017 (.034)	.019*** (.002)	-.022* (.012)	.003*** (.001)	-.463*** (.105)	-.027*** (.005)	-.019 (.012)	0 (.001)
Observations	38711	41023	38863	41180	38683	40969	38847	41162
R-squared	.026	0	.018	.002	.115	.007	.018	.002

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8.b –Returns response to Earnings and the interaction between earnings and ISc.

Return Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Start	-1	-1	-1 Day	-1 Day	+0	+0	+1 Day	+1 Day
End	Month	Month			Months	Months		
	+1	+1	+1	+1	+11	+11	+5	+5
	Month	Month	Day	Day	Months	Months	Days	Days
	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}
roi _{j,t}	.044*** (.013)	.032*** (.012)	.028*** (.004)	.031*** (.004)	.656*** (.04)	.553*** (.04)	.036*** (.005)	.037*** (.004)
ISc _{j,t} * roi _{j,t}	-.025 (.027)	-.021 (.027)	-.007 (.009)	-.009 (.009)	-.358*** (.085)	-.331*** (.087)	-.028*** (.01)	-.032*** (.009)
ISc _{j,t}	-.005 (.005)	-.016*** (.004)	-.002 (.002)	-.002 (.001)	-.015 (.015)	-.045*** (.013)	-.001 (.002)	0 (.001)
Industry FE	Yes	No	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
_cons	-.013 (.034)	.02*** (.002)	-.019 (.012)	.004*** (.001)	-.46*** (.107)	-.021*** (.006)	-.019 (.012)	0 (.001)
Observations	37738	40038	37889	40194	37711	39985	37873	40176
R-squared	.026	.001	.018	.003	.116	.008	.018	.002

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8.c –Returns response to Earnings and the interaction between earnings and ISc/IS1.

Return Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Start	-1	-1	-1 Day	-1 Day	+0	+0	+1 Day	+1 Day
End	Month	Month			Months	Months		
	+1	+1	+1	+1	+11	+11	+5	+5
	Month	Month	Day	Day	Months	Months	Days	Days
	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}
roi _{j,t}	.043*** (.013)	.034*** (.013)	.028*** (.005)	.031*** (.004)	.655*** (.042)	.548*** (.042)	.038*** (.005)	.039*** (.005)
IS1 _{j,t} * roi _{j,t}	.004 (.021)	-.001 (.02)	-.001 (.007)	-.003 (.007)	.002 (.064)	.06 (.066)	-.012 (.007)	-.012* (.007)
IS1 _{j,t}	-.001 (.004)	-.008** (.003)	.002* (.001)	.001 (.001)	.006 (.011)	-.031*** (.01)	.003** (.001)	.002 (.001)
ISc _{j,t} * roi _{j,t}	-.026 (.028)	-.021 (.027)	-.007 (.009)	-.009 (.009)	-.358*** (.085)	-.334*** (.087)	-.028*** (.01)	-.031*** (.009)
ISc _{j,t}	-.005 (.005)	-.016*** (.004)	-.002 (.002)	-.002 (.001)	-.016 (.015)	-.043*** (.013)	-.001 (.002)	0 (.001)
Industry FE	Yes	No	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
_cons	-.013 (.034)	.022*** (.002)	-.02* (.012)	.003*** (.001)	-.463*** (.107)	-.013** (.007)	-.02 (.012)	0 (.001)
Observations	37738	40038	37889	40194	37711	39985	37873	40176
R-squared	.026	.001	.018	.003	.116	.008	.019	.003

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 9 – OLS estimation of Returns from t to t on Earnings and the interaction between earnings and IS1 during the XBRL mandate period.

Return Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Start	-1 Month	-1 Month	-1 Day	-1 Day	+0 Months	+0 Months	+1 Day	+1 Day
End	+1 Month	+1 Month	+1 Day	+1 Day	+11 Months	+11 Months	+5 Days	+5 Days
	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}	ret _{j,t}
roi _{j,t}	.056*** (.017)	.048*** (.016)	.031*** (.006)	.033*** (.005)	.884*** (.053)	.816*** (.052)	.048*** (.006)	.049*** (.006)
ISC _{j,t} * roi _{j,t}	-.072 (.044)	-.074* (.043)	-.02 (.015)	-.021 (.015)	-.735*** (.138)	-.756*** (.141)	-.057*** (.016)	-.059*** (.015)
ISC _{j,t}	-.005 (.005)	-.007* (.004)	-.002 (.002)	-.003* (.001)	-.015 (.015)	.011 (.014)	-.001 (.002)	-.002 (.002)
IS1 _{j,t} * roi _{j,t}	.008 (.024)	.001 (.023)	.002 (.008)	.001 (.008)	-.086 (.074)	-.069 (.075)	-.008 (.009)	-.008 (.008)
IS1 _{j,t}	-.001 (.004)	-.008*** (.003)	.002* (.001)	.001 (.001)	.008 (.011)	-.029*** (.01)	.003** (.001)	.002 (.001)
xbtrl _{j,t}	.004 (.006)	-.019*** (.003)	0 (.002)	.002 (.001)	-.042** (.019)	-.12*** (.011)	-.002 (.002)	.004*** (.001)
roi _{j,t} * xbtrl _{j,t}	-.03 (.031)	-.031 (.03)	-.007 (.01)	0 (.01)	-.826*** (.095)	-.997*** (.096)	-.028** (.011)	-.029*** (.01)
IS1 _{j,t} * roi _{j,t} * xbtrl _{j,t}	-.021 (.048)	-.002 (.047)	-.014 (.016)	-.019 (.016)	.219 (.149)	.421*** (.152)	-.018 (.017)	-.023 (.016)
ISC _{j,t} * roi _{j,t} * xbtrl _{j,t}	.086 (.059)	.091 (.057)	.023 (.02)	.021 (.019)	.97*** (.182)	1.106*** (.186)	.06*** (.021)	.059*** (.02)
Industry FE	Yes	No	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
_cons	-.014 (.034)	.025*** (.002)	-.02* (.012)	.003*** (.001)	-.472*** (.107)	.004 (.007)	-.021* (.012)	-.001 (.001)
Observations	37738	40038	37889	40194	37711	39985	37873	40176
R-squared	.026	.002	.019	.003	.118	.014	.019	.003

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 10.a – XBRL effect on Persistence estimation

	(1)	(2)	(3)	(4)	(5)	(6)
	Pre-XBRL			Post-XBRL		
	earn _{i,t+1}	earn _{i,t+1}	earn _{i,t+1}	earn _{i,t+1}	earn _{i,t+1}	earn _{i,t+1}
earn _{i,t}	.33*** (.028)	.342*** (.027)	.098*** (.015)	.408*** (.023)	.434*** (.022)	.277*** (.014)
earn _{i,t} * IS1 _{i,t}	.085* (.049)		.158*** (.048)	.107*** (.028)		.085*** (.028)
IS1 _{i,t}	.008 (.005)		.002 (.005)	-.003 (.003)		-.002 (.003)
earn _{i,t} * ISc _{i,t}	-.477*** (.048)	-.488*** (.047)		-.354*** (.042)	-.348*** (.042)	
ISc _{i,t}	.008 (.008)	.008 (.008)		.009*** (.003)	.009*** (.003)	
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
_cons	.019 (.036)	.024 (.036)	.031 (.036)	.052 (.054)	.052 (.054)	.058 (.053)
Observations	18611	18611	18762	7641	7641	8198
R-squared	.036	.035	.03	.193	.191	.187

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 10.b – XBRL effect on Value Relevance estimation

	(1)	(2)	(3)	(4)
	Pre-XBRL		Post-XBRL	
	$\rho_{j,t}$	$\rho_{j,t}$	$\rho_{j,t}$	$\rho_{j,t}$
$\text{eps}_{j,t}$	1.021*** (.062)	.816*** (.045)	5.716*** (.245)	4.18*** (.125)
$\text{bv}_{j,t}$	.901*** (.016)	1.015*** (.012)	1.248*** (.045)	1.17*** (.026)
$\text{ISc}_{j,t}$	-8.014*** (1.028)		4.123*** (1.281)	
$\text{eps}_{j,t} * \text{ISc}_{j,t}$	-2.218*** (.159)		-4.658*** (.324)	
$\text{bv}_{j,t} * \text{ISc}_{j,t}$	.49*** (.046)		.168*** (.044)	
$\text{IS1}_{j,t}$	1.749*** (.459)		6.225*** (1.263)	
$\text{eps}_{j,t} * \text{IS1}_{j,t}$	2.392*** (.119)		1.728*** (.255)	
$\text{bv}_{j,t} * \text{IS1}_{j,t}$	-.081*** (.026)		-.314*** (.053)	
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
_cons	6.492** (3.08)	6.808** (3.124)	6.734 (20.042)	12.893 (20.024)
Observations	19287	19440	7913	8490
R-squared	.498	.473	.577	.556